



# City of Antioch Consolidated Water Use Efficiency 2002 Proposal

**Including:**  
**Proposition 13 Urban Water Conservation Program**  
**Proposition 13 Agricultural Feasibility Study Program**  
**Department of Water Resources' Water Use Efficiency Program**



CALFED  
BAY-DELTA  
PROGRAM



**Consolidated Water Use Efficiency 2002  
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**Consolidated Water Use Efficiency 2002 PSP  
Proposal Part One:  
A. Project Information Form**

1. Applying for (select one):	<input checked="" type="checkbox"/> (a) Prop 13 Urban Water Conservation Capital Outlay Grant  <input type="checkbox"/> (b) Prop 13 Agricultural Water Conservation Capital Outlay Feasibility Study Grant  <input type="checkbox"/> (c) DWR Water Use Efficiency Project	
2. Principal applicant (Organization or affiliation):	The City of Antioch	
3. Project Title:	Antioch ULFT Water Conservation Program	
4. Person authorized to sign and submit proposal:	Name, title	Phil Harrington, Interim Public Works Director
	Mailing address	P.O. Box 5007 Antioch, CA 94531
	Telephone	(925) 779-6950
	Fax.	(925) 779-6897
	E-mail	pharrington@ci.antioch.ca.us
5. Contact person (if different):	Name, title.	Julie Haas-Wajdowicz, Environmental Resource Coordinator
	Mailing address.	P.O. Box 5007 Antioch, CA 94531
	Telephone	(925) 779-7097
	Fax.	(925) 779-7034
	E-mail	jhaaswajdowicz@ci.antioch.ca.us
6. Funds requested (dollar amount):	\$78,720.00	
7. Applicant funds pledged (dollar amount):	\$28,092.50	
8. Total project costs (dollar amount):	\$106,812.50	
9. Estimated total quantifiable project benefits (dollar amount):	\$27,761.50 for first two years	
Percentage of benefit to be accrued by applicant:	59.78%	
Percentage of benefit to be accrued by CALFED or others:	40.22%	

## Consolidated Water Use Efficiency 2002 PSP

### Proposal Part One:

#### A. Project Information Form (continued)

10. Estimated annual amount of water to be saved (acre-feet):

FY 02/03=5 acre-feet  
FY 03/04=15 acre-feet  
FY 04/05= 35 acre-feet

Estimated total amount of water to be saved (acre-feet):

55 acre-feet over course of  
project

Over 5 years

125 acre-feet

Estimated benefits to be realized in terms of water quality,  
instream flow, other:

\$63,270.90 over 5 years for water  
quality, water treatment and water  
processing

11. Duration of project (month/year to month/year):

7/02-7/04

12. State Assembly District where the project is to be conducted:

11

13. State Senate District where the project is to be conducted:

7

14. Congressional district(s) where the project is to be conducted:

10

15. County where the project is to be conducted:

Contra Costa County

16. Date most recent Urban Water Management Plan submitted  
to the Department of Water Resources:

October 31, 2001

17. Type of applicant (select one):

Prop 13 Urban Grants and Prop 13  
Agricultural Feasibility Study Grants:

- ☒ (a) city  
☐ (b) county  
☐ (c) city and county  
☐ (d) joint power authority  
☐ (e) other political subdivision of the State,  
including public water district  
☐ (f) incorporated mutual water company

DWR WUE Projects: the above  
entities (a) through (f) or:

- ☐ (g) investor-owned utility  
☐ (h) non-profit organization  
☐ (i) tribe  
☐ (j) university  
☐ (k) state agency  
☐ (l) federal agency

18. Project focus:

- ☐ (a) agricultural  
☒ (b) urban

**Consolidated Water Use Efficiency 2002 PSP  
Proposal Part One:**

**A. Project Information Form (continued)**

19. Project type (select one):  
Prop 13 Urban Grant or Prop 13  
Agricultural Feasibility Study Grant  
capital outlay project related to:

- ☒ (a) implementation of Urban Best Management Practices
- ☐ (b) implementation of Agricultural Efficient Water Management Practices
- ☐ (c) implementation of Quantifiable Objectives (include QO number(s))

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☐ (d) other (specify)

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DWR WUE Project related to:

- ☐ (e) implementation of Urban Best Management Practices
- ☐ (f) implementation of Agricultural Efficient Water Management Practices
- ☐ (g) implementation of Quantifiable Objectives (include QO number(s))
- ☐ (h) innovative projects (initial investigation of new technologies, methodologies, approaches, or institutional frameworks)
- ☐ (i) research or pilot projects
- ☐ (j) education or public information programs
- ☐ (k) other (specify)
- 

20. Do the actions in this proposal involve physical changes in land use, or potential future changes in land use?

- ☐ (a) yes
- ☒ (b) no

If yes, the applicant must complete the CALFED PSP Land Use Checklist found at [http://calfed.water.ca.gov/environmental\\_docs.html](http://calfed.water.ca.gov/environmental_docs.html) and submit it with the proposal.

**Consolidated Water Use Efficiency 2002 PSP  
Proposal Part One  
B. Signature Page**

By signing below, the official declares the following:

The truthfulness of all representations in the proposal;

The individual signing the form is authorized to submit the proposal on behalf of the applicant; and

The individual signing the form read and understood the conflict of interest and confidentiality section and waives any and all rights to privacy and confidentiality of the proposal on behalf of the applicant.

_____	Phillip L. Harrington	02/27/02
Signature	Name and title	Date

## **Proposal Part Two**

### **Project Summary**

The information presented in the context of this grant proposal represents the City of Antioch's first grant application for the development of water conservation programs. As our City relies completely on surface water resources such as the San Joaquin River and the Bay Delta, there is a critical need for the development and implementation of water saving programs within our City. Located in East Contra Costa County, we have until recently relied solely on the Contra Costa Water District for the implementation of conservation programs designed to help reduce the amount of water consumed by our residents. With more than 22,000 pre-1992 single and multi-unit dwellings, the need for the water conservation program set forth in the following pages has become essential to meeting our major conservation goals and objectives.

Our City has three major objectives for the Ultra Low Flow Toilet (ULFT) program set forth herein. These objectives include: 1) providing Antioch's water service customers with water and money saving incentives and assistance; 2) stretching long-term water supplies and reducing system peak demand; and 3) implementation of our Urban Best Management Practices (BMPs), while complying with the standards outlined in the Memorandum of Understanding (MOU) regarding water conservation in the State of California.

We have developed this ULFT program to encapsulate various sectors of our community. Ranging from single and multi-family ULFT distribution programs to residential and commercial ULFT rebate programs, we are certain that we have the potential to effectively reach every aspect of our community. Utilizing strategic partnerships for both implementation and evaluation, we have maximized the potential benefits for this program by participating with community based organizations and water suppliers to reduce the programs operational costs. Through the implementation of the programs and parameters set forth, we are expecting to save approximately 125 acre-feet of water over then next five years. The requested funds of \$78,720 represents 73.70% of the total program budget for this valuable water saving program.

We have structured the implementation of the program to provide direct program benefits to our residents for the next two years with the residual savings and benefits lasting far into the future. During this initial program period, we are expecting to see a demonstrated reduction in water consumption within our City. We further anticipate the rapid growth of the program based on the successful implementation of the parameters we have established. Based on our projected costs associated with the program, we have determined that the benefits of this program will have significant impact on our residents while reducing our dependency on future importation of treated water for our community.

When combined with the program personnel assembled for this project, the programs we have developed, and our City's desire to provide much needed conservation programs, we are confident that the programs set forth in the following pages will clearly demonstrate our commitment to enhancing our water conservation efforts.

### **A. Relevance and Importance (10 points)**

#### ***Program Objectives:***

Antioch has three major objectives for the ULFT program. These objectives include: 1) to provide Antioch's water service customers with water and money savings incentives and assistance; 2) to stretch long-term water supplies and reduce system peak demand; and 3) to

implement Urban Best Management Practices (BMPs) and meet the standards outlined in the Memorandum of Understanding (MOU) regarding water conservation in the State of California.

***Antioch Water Conservation:***

In order to adhere to the aforementioned program objectives, the City's program, through ULFT events, will seek to address water conservation issues associated with inefficient toilet tanks. It is estimated that one ULFT saves 35 gallons of water per day, an approximate \$35 per year savings for single-family units and \$55 per year savings for multi-family units. Additionally, the average commercial and industrial establishment in Antioch has the potential to save an estimated 525 gallons of water per day with a savings of \$525 per year (estimated at 15 toilets per industrial/commercial unit). The aforementioned water and financial savings lend substantial merit as to the importance and relevance of the following ULFT two-component water conservation program.

***The Scope and Nature of the Four (4) ULFT Events:***

The Antioch ULFT Residential and CII Program spans two years and encompasses four semi-annual residential Ultra Low Flow Toilet (ULFT) Events and a residential and CII rebate component. At each individual event, 150 ULFTs will be available to Antioch Residents (600 total over two years). In order to foster community awareness of the availability of the ULFTs at these events, a direct mailer will target the approximate 22,000 single and multi-family units in Antioch that were built before the onset of ULFT installation to address water conservation (pre-1992). Additionally, the Environmental Science Program at Antioch High School, community-based organizations, and newspaper ads will be involved with marketing these events to the community. Each event, to be held in the parking lot of Antioch High School, will be under the direction of Antioch's Environmental Services Coordinator and carried out by student volunteers from Antioch High School. This event is to be held at Antioch High School, located in an older section of town where the majority of pre-1992 homes exist, and where a greater majority of residents live below the poverty line--approximately 35% of the high school's students participate in the Federal Free/Reduced Lunch Program. These events will entail two days; one for residential pickup of the free ULFT, and the other to drop off old toilets the following week. Each toilet returned will be placed in roll-off bins and subsequently recycled by the City's waste hauler.

***The Scope and Nature of the ULFT Rebate Program:***

The residential and CII rebates program offer incentives for residents and the commercial and industrial sectors to purchase ULFTs. A \$100 rebate will be offered to residents who provide verification of the purchase of an ultra low flow toilet for their home. Additionally, a \$300 rebate will be offered to commercial and industrial units within the City. Rebate forms will be available in electronic format on both the City and Contra Costa Water District's website, by request through mail, and also available for pickup at Antioch City Hall and the Contra Costa Water District. The administrative and marketing duties for this rebate program will be handled by both the Contra Costa Water District and Antioch's Public Works Department. This program will offer incentives for residents and the business community to conserve the region's water supply, while at the same time increasing household and business savings through a proven community water conservation practice.



### ***Critical Issues and Needs:***

A critical need exists for water conservation in the City of Antioch, as well as Contra Costa County. The City currently relies entirely on surface water, its primary sources being the San Joaquin River and the Bay-Delta. With the implementation of water conservation programs and a city-wide push for the installation of ULFTs, a decrease on the water demand would supply an array of benefits to the region, including improvement in the environmental health of the bay and river, financial savings, and ensured water supply for future use in times of drought or emergency. ULFTs would also reduce the volume of water that must go through the sewage treatment plant, thus reducing the amount of effluent discharged into the San Joaquin River. If the approximate 22,000 pre-1992 single and multi-unit dwellings replaced their 5-gallon tanks with a 1.6-gallon ULFT, a potential savings of 770,000 gallons of water per day would be realized. This figure, which excludes the substantive potential savings from a CII program, would contribute to a reduction of the need for the City to purchase treated water from the Contra Costa Water District, which costs \$.20 more per 100 cubic feet than water obtained from the local plant.

### ***Regional and Local Water Conservation Plans:***

This program is consistent with both the local regional water plan and the Contra Costa County regional plan. Currently, these two governmental entities have focused on the release of the Memorandum of Understanding from the governor outlining the pressing water conservation issues facing the State of California and the Best Management Practices associated with the advent of the State's new outline. In the City of Antioch's Water Conservation Best Management Practices Analysis, the following was relayed: "The unpredictable water supply and ever increasing demand on California's complex water resources have resulted in a coordinated effort by the DWR, water utilities, environmental organizations, and other interested groups to develop a list of urban BMPs for conserving water." The water conservation report went on to list those practices which would be most economically feasible for the City and region. From the aforementioned analysis, a five-year water conservation plan was developed by the Public Works and Community Development Departments for the City of Antioch. Consequently, the City has partnered with the Contra Costa Water District, environmental and community groups throughout the City and region, and community residents to assertively implement outlined BMPs. The City's five-year plan outlines the implementation of ULFT programs for both residents and CII for the entire five years.

## **B. Scope of Work (35 Points)**

### ***Single Family ULFT Distribution Program (Free ULFT Distribution)- 4 Events***

The proposed single-family event distribution program developed by the City of Antioch has been developed to provide single-family residential units with a viable Ultra Low Flush Toilet (ULFT) program that is convenient for the residents of our City. Our distribution programs consist of a comprehensive three-phase program designed for the effective delivery of new ULFTs and for the collection of the used 3.5 to 5 gallon toilets they have replaced.

**Phase one** of the program begins with the development of an extensive education and awareness campaign designed to educate our residents on the important aspects of the ULFT replacement program and other conservation programs designed to maximize our water saving potential. It is our belief that the implementation of this vital program will assist the City in developing the long-term awareness required for the successful implementation of our water conservation programs. Discussed later in Section E of this proposal, our public education, outreach, and

community involvement programs will be designed to guarantee maximum participation and acceptance by all segments of our community.

**Phase two** of the program will begin with the advanced procurement of the approved ULFTs. To reach our goal of maximum water efficiency, the ULFTs will be selected from an approved City vendor listing and a vendor approved by the Contra Costa Water District. Once the vendor has been selected, delivery terms will be established that coincide with the single-family ULFT distribution programs. The assigned distribution of the ULFT program will afford our residents the opportunity to actively assist the City in our conservation efforts through the installation of water saving devices. To ensure program compliance, single-family residential participants will be requested to supply proof of residency by providing a copy of the residential billing statements for the qualifying residential development. Once residential verification has been established, specific customer information such as customer's name, address, billing information, parcel number, and other viable information will be entered into a database program specifically designed to track the effectiveness of the ULFT distribution program. Customer information will be cross-referenced with CCWD to prevent the duplication of program requirements. Each customer is then further examined to ensure that the total number of ULFTs does not exceed the standards established by the program.

It is currently anticipated that the preliminary information stage will be designed to allow participants to move expeditiously through the program. Our staff and trained personnel will assist residents in the processing of their requests for ULFTs and ensure that all program participants fully understand the implications of the program. It is essential that all of the residential customers be in compliance with local regulations, ordinances, and zoning provisions. To accomplish this we will provide City issued forms to the resident and assist them in the development of the required information. These forms will then be signed and completed by the residential customer to ensure complete understanding of the proposed program. As an added feature of convenience, the City and Antioch High School will assist in the collection and processing of the previously stated forms to ensure full compliance with the designated regulatory requirements.

The information gathering stage outlined above will be conducted in a multi-stage process to guide the residential customer to the next stage. In most cases program personnel will be established at a minimum of three locations within the distribution area to ensure complete coverage of the area.

The next phase of our program consists of the actual delivering of the designated ULFT. Once a program participant has been authorized to obtain a ULFT, the resident shall then be directed to proceed to the delivery area where the resident shall receive their free ultra-low flush toilet complete with self-installation instructions. At this stage the serial number of each ULFT (if applicable) will be registered with the customer's previously mentioned billing information. The information will then be entered into a database and reconciled with the other customer information to create a single database for water saving reduction measurements and for submission during the quarterly reporting process. Program coordinators, staff, and student volunteers will be on site to assist residential customers with the loading of the ULFT as well as provide them with information as to the correct and proper installation of the designated units.

To ensure that all residents are provided with the correct information on the proper installation, the City will further provide trained staff on site to assist residential program participants and answer any potential questions that they may have. In some cases the assistance may consist of installation questions and specification information relative to the newly acquired device. Others may require specific problem solving questions to ensure the proper installation of the ULFT

device. In either circumstance, trained and professional staff will be on hand to ensure the proper transition of the ULFT units.

**Phase three** of the Single Family Residential ULFT Distribution Program revolves around the return of the replaced toilet. Within two weeks of the initial distribution of the ULFT(s), residential customers will be required to return the used toilet to a designated location for credit and to ensure that the new ULFT has been installed in the designated residential dwelling unit. Residential customers will be asked to bring the UPC code, serial number, or other proof of identification from the new ULFT to assist in the verification process.

The City's program will provide for the collection of the used toilet. The program will consist of a stationary location on the following two weekends where residential customers can return their old and recently replaced toilets. These locations will be staffed during designated hours for the collection and verification of the installation process. To ensure that the City is able to collect all of the ULFTs provided to our residents, follow-up telephone calls will be made to program participants who fail to return their old toilets within the time frame provided.

Once returned, the old ULFTs will be gathered and prepared for recycling and/or disposal by an agent selected by the City. Preparing the old toilets for recycling will involve the complete removal of all wax rings, bolts, gaskets, seats, lids, interior flow mechanisms, and any part that is not considered to comprise of either the bowl or tank.

#### ***Multi-Family Residential Bulk Distribution (Free to Participants)***

The distribution of multi-family residential ULFTs designated under this program will be conducted through locally based multi-family residential dwelling units. To ensure the success of the distribution program, the City of Antioch and our affiliates will work closely with qualifying property owners to provide ULFT programs to the designated facilities. To maximize the potential for the successful implementation of the program, we will focus on those multi-family residential units that have a history of high water consumption. Our staff and public liaisons will provide program information to all qualified owners, property managers, and association groups to maximize the potential exposure and success of the program.

Once a qualifying multi-family property has been established under the program, residential and parcel information will be checked in our database to ensure that the residents who occupy the designated units have not duplicated the program. This information will be added to our developed database and made available during our regular internal compliance periods as well as presented in our quarterly reports for compliance verification.

Prior to the actual installation of the ULFT devices, their delivery will be arranged with the respective managing authority of the parcel and/or dwelling unit to ensure the maximization of the distribution program. In most cases the ULFTs will be delivered in bulk to a designated location on the qualifying site. On-site personnel, property managers, and/or property owners will be required to arrange for the installation of the toilets. All ULFTs delivered to a designated location will be inventoried and updated regularly to assist in the installation verification of the program. On-site installation personnel will be required to document which units a particular ULFT was installed in as well as the correct date of installation. Serial numbers or other identifiable markings will be recorded to ensure the complete and accurate accounting of all ULFTs designated under this phase of the program. Should it be the desire of the multi-family residential dwelling complex and/or owner of the qualifying parcel to obtain assistance in the installation of the ULFTs, the City will provide recommendations and listings of potential installation firms who may perform the services in a professional and timely manner.

Once the ULFTs have been delivered to the designated multi-family location, the City will arrange for the necessary recycling and disposition of the old toilets replaced by the program. We will work with qualified program participants in this phase to allow adequate time for the proper installation of the ULFTs. The time frame allotted for each location will be established by the City and provided during our regular reporting periods.

### ***Seniors and Physically Challenged Program Participants***

Our City realizes the importance and need to include members of our community that may be elderly, physically challenged, or incapacitated in such a manner that would prevent them from participating in the program. To this end, we will make every effort to ensure that our residents fitting the identified grouping are afforded that same level of program participation as other members of our City. For seniors and other physically challenged residents, the City will explore the possibility of providing a direct installation program to them as to allow them to benefit in the same manner as other residents.

While we are aware of the potential challenges that face a direct installation program, we are aware of the measures required to mitigate the potential difficulties facing the installation of devices for the physically challenged and seniors of our community. Should this option be implemented by the City due to the interest in participation, our goal will be to ensure the best quality installation at the best possible price. The services designed for this program will seek the assistance of the City's ADA coordinator and others in the community that provide services to the elderly and mobility impaired to assist in the dissemination of the required information. When a physically challenged individual is desirous of a ULFT, every attempt will be made to ensure that the device selected meets the requirements and needs of the requesting individual.

To assist in the installation process, the City may procure enough handicapped ULFTs to meet the demand of our local jurisdictional constituent base. This will be accomplished through a proportional representation of our community. The program will only authorize the services of professional installers who can demonstrate their experience in all phases of ULFT installations.

Once a qualified person has been identified as a candidate for the potential installation of a handicapped ULFT, the City will add all of the relevant information into our database for cross-referencing. The information will be analyzed against our previously developed database to ensure that the program participant has been designated as the recipient of a free ULFT and/or a handicapped ULFT. After said designation has been established, the City and our collaborative partners may set an appointment with the specified individual. All appointment times will be made to meet the time availability of the recipient while maximizing the frequency of the installation process.

### ***Residential Rebates to Qualified Participants***

To assist in the further development and awareness of the City's water conservation programs, we will implement a residential rebate program designed to enlist residential participation in the installation of ULFTs. Under our residential program, residential participants interested in the rebate program will be asked to complete the required documentation for the ULFT rebate program. We will design our rebate program forms to be easily accessible to our residential population. Residents requesting to participate in the rebate program will be able to provide the necessary information either by regular mail, in-person delivery, or via electronic media forms made available by the City.

Once the City has received all of the necessary information forms, prospective program participants will be entered into our database as a qualified recipient of the rebate program. This \$75.00 rebate will be available to all Antioch residents who currently reside within the statutory limits of the City. The program is targeted at those residents who reside within pre-1992 residential dwellings; and to assist our residents with the cost of replacing their existing, high-usage toilets, generally ranging from 3.5 to 5 gallons per flush, with new ultra-low flush toilets that utilize only 1.6 gallons per flush. The number of ULFT rebates requested will be entered into our system, and a combined total will be tracked for disbursement.

Once a qualified customer has completed and submitted the necessary information, the City will work closely with Contra Cost Water District, our collaborative partner, to prepare a rebate check for the customer. CCWD has been selected as our partner in an attempt to reduce the costs associated with the rebate program. As the CCWD is currently implementing a successful residential rebate program for their entire district, our program is designed to provide these valuable incentives for Antioch residents only. By incorporating our rebate program with CCWD's, our program related costs are dramatically reduced. Once processed, the rebate check will then be signed and forwarded to the project manager for dissemination to the resident. This process ensures that the resident is aware of the importance of the water conservation program and illustrates the commitment that our City and affiliates have made to this program and others similar in nature.

### ***Commercial, Industrial, and Institutional Rebate Program***

Similar in nature to the residential rebate program set forth above, the Commercial, Industrial, and Institutional Rebate Program (CII) will be offered to commercial customers as an incentive to replace older water devices. To qualify for this CII rebate program, qualifying businesses must replace older water consuming toilets with new 1.6 gallon per flush commercial grade toilets. Our program will offer a rebate of up to \$300.00 to businesses that install commercial valve, gravity tank, or pressure-assisted 1.6-gallon flush toilets. Similar in nature to the CCWD rebate program, we will provide a 100% rebate of the material cost of the bowl, valve, and/or tank up to a maximum of \$300. Businesses eligible for this program will include all commercial establishments, health clubs, hotels, industrial buildings, institutions, motels, office buildings, restaurants, retail establishments, schools, shopping centers, and supermarkets, among others.

Once a qualified CII customer has completed and submitted the necessary information, the City will work closely with Contra Costa Water District, our collaborative partner, to prepare a rebate check for the customer. Once processed, the rebate check will then be signed and forwarded to the project manager for dissemination to the business. We are confident that this process will ensure that the business is aware of the importance of our water conservation programs.

### ***Task List and Schedule***

The following tasks have been developed based on a program implementation schedule that coincides with the required reporting parameters.

<b>1st Quarter Task</b>	<b>Deliverable items</b>	<b>Start Date</b>	<b>End Date</b>	<b>Project Cost</b>	<b>Quarterly Expenditure</b>
Develop baseline measurements	Initial database formulation	10/07/02	11/01/02	\$0.00	\$0.00
Develop education and outreach program	Campaign Development and implementation	11/01/02	01/31/03	\$2,780.00	\$2,780.00

ULFT procurement personnel	Labor for Procurement	11/02/02	01/01/03	\$618.00	\$618.00
Procure ULFTs for distribution event	ULFT 150 Procurement	11/02/02	01/01/03	\$15,000.00	\$15,000.00
Distribute ULFTs	Distribution event	02/09/02	02/09/02	\$1,750.00	\$1,750.00
Toilet disposal	Disposal of old toilets	02/09/03	02/09/03	\$550.00	\$550.00
Collection of used toilets	Toilet collection	02/22/03	02/22/03	\$750.00	\$750.00
Evaluation and reporting	Quarterly Report	02/09/03	03/21/03	\$1,017.00	\$1,017.00
<b>1st Quarter Budget Total</b>					<b>\$22,465.00</b>

2nd Quarter Task	Deliverable items	Start Date	End Date	Project Cost	Quarterly Expenditure
Residential ULFT rebates	Issue rebates	04/01/03	06/30/03	\$1,250.00	<b>\$1,250.00</b>
Residential rebate Coordinator	Process rebate forms and checks	04/01/03	06/30/03	\$1,351.87	<b>\$1,351.87</b>
CII ULFT rebates	Issue rebates	04/01/03	06/30/03	\$3,750.00	<b>\$3,750.00</b>
CII rebate Coordinator	Process rebate forms and checks	04/01/03	06/30/03	\$386.25	\$386.25
<b>2nd Quarter Budget Total</b>					<b>\$6,738.12</b>

3rd Quarter Task	Deliverable items	Start Date	End Date	Project Cost	Quarterly Expenditure
Develop baseline measurements	Initial database formulation	7/1/03	07/11/02	\$0.00	\$0.00
Develop education and outreach program	Campaign Development and implementation	07/01/03	07/25/03	\$2,780.00	\$2,780.00
ULFT procurement personnel	Labor for Procurement	07/07/03	07/21/03	\$618.00	\$618.00
Procure ULFTs for distribution event	ULFT 150 Procurement	07/07/03	07/21/03	\$15,000.00	\$15,000.00
Distribute ULFTs	Distribution event	07/19/03	07/19/03	\$1,750.00	\$1,750.00
Toilet disposal	Disposal of old toilets	07/27/03	07/27/03	\$550.00	\$550.00
Collection of used toilets	Toilet collection	07/27/03	07/27//03	\$750.00	\$750.00
Evaluation and reporting	Quarterly Report	07/19/03	09/19/03	\$1,017.00	\$1,017.00
<b>3rd Quarter Budget Total</b>					<b>\$22,465.00</b>

4th Quarter Task	Deliverable items	Start Date	End Date	Project Cost	Quarterly Expenditure
Residential ULFT rebates	Issue rebates	10/01/03	12/31/03	\$1,250.00	\$1,250.00
Residential rebate Coordinator	Process rebate forms and checks	10/01/03	12/31/03	\$1,351.87	\$1,351.87
CII ULFT rebates	Issue rebates	10/01/03	12/31/03	\$3,750.00	\$3,750.00
CII rebate Coordinator	Process rebate forms and checks	10/01/03	12/31/03	\$386.25	\$386.25
<b>4th Quarter Budget Total</b>					<b>\$6,738.12</b>

5th Quarter Task	Deliverable items	Start Date	End Date	Project Cost	Quarterly Expenditure
Develop baseline measurements	Initial database formulation	01/05/04	01/28/04	\$0.00	\$0.00
Develop education and outreach program	Campaign Development and implementation	01/05/04	02/27/04	\$2,780.00	\$2,780.00
ULFT procurement personnel	Labor for Procurement	01/05/04	02/27/02	\$618.00	\$618.00
Procure ULFTs for distribution event	ULFT 150 Procurement	01/05/04	02/27/04	\$15,000.00	\$15,000.00
Distribute ULFTs	Distribution event	03/13/04	03/13/04	\$1,750.00	\$1,750.00
Toilet disposal	Disposal of old toilets	03/28/04	03/28/04	\$550.00	\$550.00
Collection of used toilets	Toilet collection	03/28/04	03/28/04	\$750.00	\$750.00
Evaluation and reporting	Quarterly Report	03/13/04	03/31/04	\$1,017.00	\$1,017.00
<b>5th Quarter Budget Total</b>					<b>\$22,465.00</b>

6 <sup>th</sup> Quarter Task	Deliverable items	Start Date	End Date	Project Cost	Quarterly Expenditure
Residential ULFT rebates	Issue rebates	04/01/0	06/30/03	\$1,250.00	\$1,250.00
Residential rebate Coordinator	Process rebate forms and checks	04/01/0	06/30/03	\$1,351.87	\$1,351.87
CII ULFT rebates	Issue rebates	04/01/0	06/30/03	\$0.00	\$0.00
CII rebate Coordinator	Process rebate forms and checks	04/01/0	06/30/03	\$0.00	\$874.39
<b>6th Quarter Budget Total</b>					<b>\$3,476.26</b>

7th Quarter Task	Deliverable items	Start Date	End Date	Project Cost	Quarterly Expenditure
Develop baseline measurements	Initial database formulation	07/01/04	07/14/04	\$0.00	\$0.00
Develop education and outreach program	Campaign Development and implementation	07/01/04	08/16/04	\$2,780.00	\$2,780.00
ULFT procurement personnel	Labor for Procurement	07/01/04	08/16/04	\$618.00	\$618.00
Procure ULFTs for distribution event	ULFT 150 Procurement	07/01/04	08/16/04	\$15,000.00	\$15,000.00
Distribute ULFTs	Distribution event	09/05/04	09/05/04	\$1,750.00	\$1,750.00
Toilet disposal	Disposal of old toilets	09/18/04	09/18/04	\$550.00	\$550.00
Collection of used toilets	Toilet collection	09/18/04	09/18/04	\$750.00	\$750.00
Evaluation and reporting	Quarterly Report	09/05/04	09/30/04	\$1,017.00	\$1,017.00
<b>7th Quarter Budget Total</b>					<b>\$22,465.00</b>
					\$106,812.50

## ***Monitoring and Assessment***

We are extremely committed to the ultimate success of our comprehensive water conservation program established herein and have developed both internal and external monitoring and evaluation measures to ensure the program's success. Prior to the implementation of the project, we will obtain consumption information on all residential developments and commercial businesses within our target population. The consumption rates established prior to program implementation will serve as our baseline measurement for which to gauge the future success of our program. Utilizing the historical data available through CCWD, consumption habits will be calculated and incorporated into the final baseline consumption table.

As each new participant enlists the valuable services provided under our program, the individual parcel will then be monitored for usage and measured against the baseline average consumption rates. Utilizing available data for Antioch specific residents, each individual parcel participating in the program will be evaluated with other developments of a similar nature. The purpose of this analysis is to ensure that we are able to provide quantifiable data that reflects the overall impact of the program. Our internal evaluation team will provide monthly evaluations and present this information in consolidated form to our external evaluation team comprised of various persons familiar with water conservation issues and related programs. It is anticipated that this external team will be comprised of individuals from CCWD and the City of Antioch. We further anticipate that external evaluation meetings will be conducted at the end of each quarter and will be given the primary responsibility of providing independent evaluation of all program-related aspects. The outcome of these analytical sessions will be consolidated into a comprehensive water-use analysis and program-evaluation report to be disseminated to various interested and affected parties.

In addition, after each of our four ULFT distribution events, program personnel, including representatives from the City, CCWD, Antioch High School, collaborative community groups, and various program participants (if available), will convene to review the operation parameters of the program. Every aspect of the program will be analyzed for completeness and accuracy. Should any party or individual determine that changes to the program are warranted, the identified concerns will be reviewed and, if necessary, approval of changes will be made through consensus. Each of the reviewing parties will be asked to determine the extent that the program has met the designated goals and objectives and outcomes of the program.

### **C. Qualifications of the Applicants (10 points)**

The City of Antioch has initiated a collaborative community effort in an attempt to bring this program to all of the approximate 22,000, pre-1992 built, residential and multi-family dwellings as well as the commercial and industrial sectors in need of Ultra Low Flush Toilets (ULFT) to address community water conservation issues. The three major contributors to the Antioch ULFT CII and Residential Program are the City of Antioch Public Works and Community Development Departments, the Environmental Science Program at Antioch High School, and the Contra Costa Water District. As it is imperative to the successful implementation of the project, the qualifications of the three contributors and their personnel are outlined in subsequent detail as well as the important role that each will play in the water conservation project outlined in this proposal.

Julie Haas-Wajdowicz, Environmental Resource Coordinator for the Community Development Department in the City of Antioch, is the Program Director for the ULFT water conservation project. Ms. Haas-Wajdowicz has worked for the City of Antioch for two years. She coordinates the efforts of the NPDES, water conservation and solid waste programs for the City.



As chief developer of the City's water conservation, programs and outreach materials, including a regional water conservation and quality residential water survey program and program coordination between the local water district and the city programs, Ms. Haas-Wajdowicz is well experienced and qualified to carry out all the tasks and programmatic development associated with the City's ULFT program.

Ms. Haas-Wajdowicz served as Program Specialist at the Alameda County Waste Management Authority. One of her duties included assisting in the planning and implementation of the operations of semi-annual Compost Bin Distribution events. She has developed site plans for events, including customer paperwork and product flow, parking and volunteer training, and recruitment as well as coordinating pre-event set up.

Ms. Haas-Wajdowicz served as the Public Outreach Coordinator for the Green Team of San Jose, CA for two years, at which time she worked extensively on programs and techniques that fostered community involvement in environmental programs. Some of these projects included designing displays and program literature, implementing city-wide programs, providing staff training, material development, and public education for company tours, environmental education fairs, Earth Day Events, Clean Campus Programs, as well as others. Ms. Haas-Wajdowicz holds a degree in Economic and Environmental Studies from the University of California, Santa Barbara and has worked extensively within the field of Environmental Science, particularly in the areas of waste management, water conservation, and public outreach, for over five years. Julie Haas-Wajdowicz's skills and efforts have been, and will continue to be, a great asset to the development of water conservation programs for the City of Antioch. She will serve as an extremely competent leader who will coordinate all community efforts, develop marketing strategies for the program, and carry out the detailed tasks for the semi-annual ULFT events. Ms. Haas-Wajdowicz will also serve as the volunteer coordinator and supervisor for the Antioch High School students who will participate in the marketing and labor of the four ULFT residential events.

Another contributor to the efforts of the City's ULFT program are the students of the Environmental Science Program at Antioch High School, under the direct supervision of Julie Haas-Wajdowicz and the Environmental Science Program Instructor. The students will be involved in the marketing of the ULFT program, as well as providing volunteer hours at the four community events. The Environmental Science Program consists of approximately 30 high-school students committed to learning about the issues associated with the environment and then applying that knowledge and enthusiasm to the creation of campus-wide environmental programs, such as the Antioch High School White Recycling Program and the Antioch High School Garden and Greenhouse Program, as well as participating in community events that enhance environmental resources and foster environmental awareness. The Program's teacher, Ms. Laura Schreiber, holds a Master's Degree in Environmental Management and is focused on bringing environmental awareness issues, as well as local and regional environmental problems, to the classroom in order to foster a sense of pride in community programs and encourage environmental rehabilitation and protection in the City of Antioch. Along with the City's Public Works Department and Antioch High School, Contra Costa Water District has become a collaborative partner in the residential and CII ULFT rebate portion of the program.

The City of Antioch has formed a partnership with the Contra Costa Water District (CCWD) to assist in the implementation of local water conservation programs that address the needs of the East Bay community. The Contra Costa Water District's service area expands across north, central, and east Contra Costa County and serves nearly 450,000 people in these areas. Approximately 250,000 people receive treated water directly from CCWD; the other 200,000 receive water from one of six local agencies supplied water from the CCWD. With 338

employees and plant property and equipment worth over \$3,815,851,000, the Contra Costa Water District commands a large, experienced operational unit that is very knowledgeable in the ways of water conservation. The CCWD draws its water from the Sacramento-San Joaquin Delta under a contract with the Federal Central Valley Project and thus is extremely concerned with the environmental and conservation issues facing this water supply and the residents that this supply serves.

The aforementioned concerns of the CCWD have led to the evaluation of water conservation programs and the best management practices that would foster programs that conserve water and address the unique needs of the area that the CCWD serves. The Contra Costa Water District has partnered with the City of Antioch to handle a selected portion of the marketing and assist in the administration associated with the ULFT residential rebate and CII program. Collectively, our websites will offer all information and forms necessary for residents to understand and participate in the rebate program. Chris Dundon, CCWD's Water Conservation Coordinator and his staff will be available to field questions and assist in the administrative process characteristic of the ULFT rebate program. CCWD's program is currently operational, with much success found in other cities and communities throughout the district's region. The success of the ULFT rebate program has in part prompted the more extensive and assertive development of Antioch's ULFT program for FY 2002/2003 and FY2003/2004. The CCWD will play a substantial role in the rebate aspect of this program by enabling Antioch to reach a broader constituency of pre-1992 dwellings and assist in the administration associated with this program.

#### **D. Benefits and Costs (35 points)**

##### *Budget*

Description	Units	Rate	Total	Grant Funds Requested	City Funds Pledged	Total Event Program Cost	Total	2 Year Total
<b>Residential ULFT Distribution Program</b>								
<b><i>Distribution Events</i></b>								
Purchase of ULFT per Event	150.00	\$75.00	\$11,250.00	\$11,250.00	\$0.00	\$11,250.00	4.00	\$45,000.00
Marketing Postage	2,000.00	\$0.34	\$680.00	\$680.00	\$0.00	\$680.00	4.00	\$2,720.00
Printing of Information	2,000.00	\$0.05	\$100.00	\$0.00	\$100.00	\$100.00	4.00	\$400.00
Used ULFT Disposal	2.00	\$275.00	\$550.00	\$0.00	\$550.00	\$550.00	4.00	\$2,200.00
Environmental Resource Coordinator w/ Benefits	130.00	\$30.90	\$4,017.00	\$0.00	\$4,017.00	\$4,017.00	4.00	\$16,068.00
Part-time Project Coordinator	100.00	\$15.00	\$1,500.00	\$1,500.00	\$0.00	\$1,500.00	4.00	\$6,000.00
ULFT Procurement Personnel	20.00	\$30.90	\$618.00	\$0.00	\$618.00	\$618.00	4.00	\$2,472.00
			<b>\$18,715.00</b>	<b>\$13,430.00</b>	<b>\$5,285.00</b>	<b>\$18,715.00</b>	<b>4.00</b>	<b>\$74,860.00</b>
Total Grant Funds Requested				\$53,720.00	\$0.00			
Total City Pledge Funds				\$0.00	\$21,140.00			
Total Program Funds				\$53,720.00	\$21,140.00	\$74,860.00		
Percentage of Funds Allocated				71.76%	28.24%			

Description	Units	Rate	Total	Grant Funds Requested	City Funds Pledged	Total Event Program Cost	Total	2 Year Total
<b><u>Residential ULFT Rebate Program</u></b>								
ULFT Rebates	100.00	\$100.00	\$10,000.00	\$10,000.00	\$0.00	\$10,000.00	1.00	\$10,000.00
Residential Rebate Coordinator	175.00	\$30.90	\$5,407.50	\$0.00	\$5,407.50	\$5,407.50	1.00	\$5,407.50
			<u>\$15,407.50</u>	<u>\$10,000.00</u>	<u>\$5,407.50</u>	<u>\$15,407.50</u>		<b>\$15,407.50</b>
Total Grant Funds Requested				\$10,000.00	\$0.00	\$10,000.00	1.00	
Total City Pledge Funds				\$0.00	\$5,407.50	\$5,407.50		
Total Program Funds				<u>\$10,000.00</u>	<u>\$5,407.50</u>	<u>\$15,407.50</u>		
Percentage of Funds Allocated				<u>64.90%</u>	<u>35.10%</u>			

Description	Units	Rate	Total	Grant Funds Requested	City Funds Pledged	Total Event Program Cost	Total	2 Year Total
<b><u>CII ULFT Rebate Program</u></b>								
ULFT Rebates	50.00	\$300.00	\$15,000.00	\$15,000.00	\$0.00	\$15,000.00	1.00	\$15,000.00
CII Rebate Coordinator w/ Benefits	50.00	\$30.90	\$1,545.00	\$0.00	\$1,545.00	\$1,545.00	1.00	\$1,545.00
			<u>\$16,545.00</u>	<u>\$15,000.00</u>	<u>\$1,545.00</u>	<u>\$16,545.00</u>		<b>\$16,545.00</b>
Total Grant Funds Requested				\$15,000.00	\$0.00	\$15,000.00	1.00	
Total City Pledge Funds				\$0.00	\$1,545.00	\$1,545.00		
Total Program Funds				<u>\$15,000.00</u>	<u>\$1,545.00</u>	<u>\$16,545.00</u>		
Percentage of Funds Allocated				<u>90.66%</u>	<u>9.34%</u>			

Allocated Funding	Grant Amount	% of Total Program
<b>Grant Funds Requested</b>	<b>\$78,720.00</b>	<b>73.70%</b>
Total City Pledge Funds	\$28,092.50	26.30%
Total Event Program Cost	\$106,812.50	100.00%

### ***Budget Justification***

The budget items presented within the context of this proposal represent a truly cost effective method to meeting the needs, goals, and objectives of our water conservation programs and have been presented based on categorical references applicable to our individual programs. For the purpose of this project, the City is not anticipating the utilization of outside consultants or other individuals not directly connected to the project or identified as a collaborative partner here. As such, we have not included such individuals in our detailed itemized budget. As much of the incidental program cost will be absorbed by the City, expendable items such as office space, computing time, and other such supplies have been omitted from the program as they have been accounted for in various departmental budgets throughout the City.

We have further based our expenditures on cost saving measures developed to ensure that the program set forth in this proposal is completed within the confines of the budget parameters set forth herein. Through our collaborative partners identified herein, we are able to procure ULFT devices at prices substantially less than we would pay if purchased separately. The utilization of pre-program bulk purchase options will permit a program savings that allows us to provide additional water conservation services to our residents and businesses. Salaries and benefits have been allocated based on proportional time anticipated for each of the designated programs and have been analyzed for cost effectiveness. Based on actual compensation schedules, the expenditures associated with this program provide a realistic depiction of program personnel costs. To assist in the cost effectiveness of our proposed programs, the City will incur all printing and marketing costs associated with the promotion of our project. Our ability to provide these services has reduced our dependency on outside resources and has permitted greater control over our promotional outreach, education, and awareness programs.

As detailed within the context of our itemized budget, the City and our collaborative partners have allocated 27.59% (\$28,092.50) of the projects total expenditures, which have been established at \$101,812.50. Although the program itself total exceeds \$100,000, the requested funding under Proposition 13 accounts for only 72.41% (or \$72,720). This cost-sharing allocation clearly demonstrates our commitment to the viability of the program and ensures that our water conservation program is implemented in the most cost-effective manner available. As our committed funding is absorbed within our various department budgets, we are able to ensure that our programs will have sufficient funding throughout the life of the program.

### ***Costs and Benefits***

The following list of costs and benefits have been set forth to demonstrate the general parameters of the ULFT Replacement Programs. Our analysis and assumptions incorporate generally accepted water conservation practices and institute long-standing programmatic concepts based on established principles of conservation, awareness, and best management practices.

#### Costs

- Initial start up of the program--\$106,812.50.
- Marketing to all identified pre-1992 residents.
- Residential installation (borne by program participant)

#### Benefits

- Water savings estimated to be 5 acre/feet for 2002/2003, 15 acre/feet for 2003/2004, and 35 acre/feet annually thereafter
- Foster community involvement and increased participation through water conservation efforts
- Awareness/Education Regarding Environmental problems
- Financial savings to residents/City
- Antioch students—Fundraiser/Community service, environmental awareness.
- Approximately \$.20 cost differential between the City producing treated water and purchasing treated water from CCWD

The potential benefits associated with the implementation of the City's ULFT replacement programs are clearly demonstrated in our ability to quantify documented water savings. Through the information gathered, the City will be able to develop additional water conservation programs that target those residents known to consume larger amounts of water due to their

traditional habits and practices. We are certain that the information gathered in association with this program will permit the City and the CCWD to realize continued benefits through the reduced dependency on the purchase of treated water. It is further anticipated that the public awareness of water conservation will be enhanced through these conservation programs.

With our water treatment facility reaching potential capacity, we anticipate that the long-term benefits of the program will allow the City and our residents to benefit from cleaner water by reducing the demand on the City's current treatment systems. When combined with the enhanced environmental benefits of ULFT programs and cost savings generated from reduced water consumptions, the project set forth herein will demonstrate benefits long into the future and provide the City of Antioch a viable alternative to the purchase of treated water from CCWD.

#### **E. Outreach and Community Involvement and Acceptance (10 points)**

The City of Antioch understands the complexities associated with programs of this type and has developed the following marketing, outreach, and community involvement methodologies to ensure the success of the program's parameters. Essential to the successful implementation of the program is the clear and present understanding of the program's overall conceptual design. Each of the program phases developed by the City has been developed to ensure the maximization of the potential market. As varied are the City's demographic composition; so too are the programs we have designed. Each of our outreach and community involvement campaigns are designed to meet the demographics of our community.

##### ***Single Family ULFT Distribution Program (Free ULFT Distribution)- 4 Events***

Single-family residential units are perhaps the most abundant of markets to utilize for the distribution of ULFTs. Our unique approach to enhancing the public outreach for this segment centers on promoting community support. Working together with Antioch High School and other community based organizations; the program's overall message of water use reduction through water conservation programs will be enhanced in the community. It has been our experience, in programs of this nature, that a strong sense of community support is vital to the program's overall success.

The City will ensure that all of the single-family residents within our targeted areas are informed and educated as to the requirements of the program as well as the much-needed concept of water conservation. It is our intention to conduct an extensive marketing campaign designed for the residential customer to ensure a complete understanding of the programmatic requirements. It is anticipated that the public outreach programs envisioned for this program will encompass direct mailers to single-family households within the affected areas as well as the possible distribution of door-to-door educational materials, newspaper advertisements, and other advertising campaigns. Event promotional materials will be designed to solicit maximum support from single-family residential customers.

##### ***Multi-Family Residential Bulk Distribution (Free to Participants)***

To ensure the success of the anticipated multi-family ULFT distributions, our program will focus on the success of many of our multi-family dwelling unit programs. Based on our intimate knowledge of the above-mentioned programs and our extensive contacts within the multi-family communities, our program will design and develop promotional campaigns focused directly on the properties that utilized high water consumption. In many cases direct contact with apartment owners and property management companies will be made to solicit support for the distribution

program. Our reasoning for the direct contact stems from the concept that while the residential customer may desire a new ULFT, more often than not the owner, landlord, or property manager may not be aware of the replacement and as a result may not authorize the installation of the units.

While we will not prevent individual residents from participating in the program, we will make every attempt to ensure that the owner or property manager has authorized the exchange of the designated units. Promotional outreach programs will also include the distribution of educational materials designed to provide water conservation advice and tips to the residents of the multi-family sectors within the affected areas.

### ***Residential and CII Rebates to Qualified Participants***

The City has developed a targeted approach to the public outreach and community involvement rebate programs set forth herein. We will construct a detailed database of all previous and current rebate participants, as well as all residential units who have obtained a ULFT through previous program methods. Our team will develop an approved ULFT application form to be distributed to the program participants. To ensure the success of the program, the City will not only provide published information as to the rebate program, but will also work with local retailers, wholesalers, and installers to promote the ULFT Rebate Program. In some cases rebate forms will be made available at point of sale locations and other key locations throughout the City. In others, we will develop a rebate by mail and/or electronic mail system to maximize the effectiveness of the program.

Although the City is collaborating with Antioch High School and Contra Costa Water District, we will also be developing collaborative efforts with other community based organizations interested in assisting with the program. Each of the collaborators on this project have committed time and resources to guarantee the success of the program.